

What is claimed is:

1. A solid-state imaging device comprising the following in the same semiconductor substrate:
 - 5 a photodiode;
 - a circuit element that is adjacent to the photodiode; and
 - a device isolation that is adjacent to the photodiode in the same semiconductor substrate,wherein an antireflection film that is out of contact with
 - 10 the device isolation is provided over the light-receiving surface of the photodiode.
2. The solid-state imaging device according to Claim 1, wherein an end of the antireflection film on the device isolation
 - 15 side is spaced by a predetermined distance away from the device isolation.
3. The solid-state imaging device according to Claim 1, comprising a device-isolation protecting film that protects the
 - 20 device isolation, located between the antireflection film and the device isolation.
4. The solid-state imaging device according to Claim 1, comprising a light-receiving surface protecting film that
 - 25 protects the light-receiving surface of the photodiode, located between the antireflection film and the light-receiving surface of the photodiode.
5. The solid-state imaging device according to Claim 4,
 - 30 wherein the light-receiving surface protecting film has an

opening that exposes the light-receiving surface of the photodiode, and the antireflection film covers the light-receiving surface of the photodiode, which is exposed from the opening.

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6. A solid-state imaging device comprising the following in the same semiconductor substrate:

a photodiode;
a circuit element that is adjacent to the photodiode; and
10 a device isolation that is adjacent to the photodiode, wherein an antireflection film that is out of contact with the device isolation and the circuit element is provided over the light-receiving surface of the photodiode.

15 7. The solid-state imaging device according to Claim 6, wherein one end of the antireflection film on the device isolation side is spaced by a predetermined distance away from the device isolation, and the other end of the antireflection film on the circuit element side is spaced by a predetermined distance away
20 from the circuit element.

8. The solid-state imaging device according to Claim 6, comprising:

a device-isolation protecting film that protects the device
25 isolation, located between the antireflection film and the device isolation; and

a circuit-element protecting film that protects the circuit element, located between the antireflection film and the circuit element.

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9. The solid-state imaging device according to Claim 6, comprising a plurality of insulating films that cover the light-receiving surface of the photodiode, located over the light-receiving surface of the photodiode;

5 wherein the plurality of insulating films have a penetrating hole that exposes the light-receiving surface of the photodiode, and the antireflection film covers the light-receiving surface of the photodiode, which is exposed from the penetrating hole.

10 10. The solid-state imaging device according to Claim 6, comprising a light-receiving surface protecting film that protects the light-receiving surface of the photodiode, located between the antireflection film and the light-receiving surface of the photodiode.

15 11. The solid-state imaging device according to Claim 10, wherein the light-receiving surface protecting film has an opening that exposes the light-receiving surface of the photodiode, and the antireflection film covers the
20 light-receiving surface of the photodiode, which is exposed from the opening.

12. A solid-state imaging device comprising the following in the same semiconductor substrate:

25 a photodiode;
a circuit element that is adjacent to the photodiode; and
a device isolation that is adjacent to the photodiode,
wherein an antireflection film formed of silicon oxynitride
film is provided over the light-receiving surface of the
30 photodiode.